Multilayer SiO_x derived from Si-Ca alloy via Fe_2O_3 oxidization for Li-ion batteries

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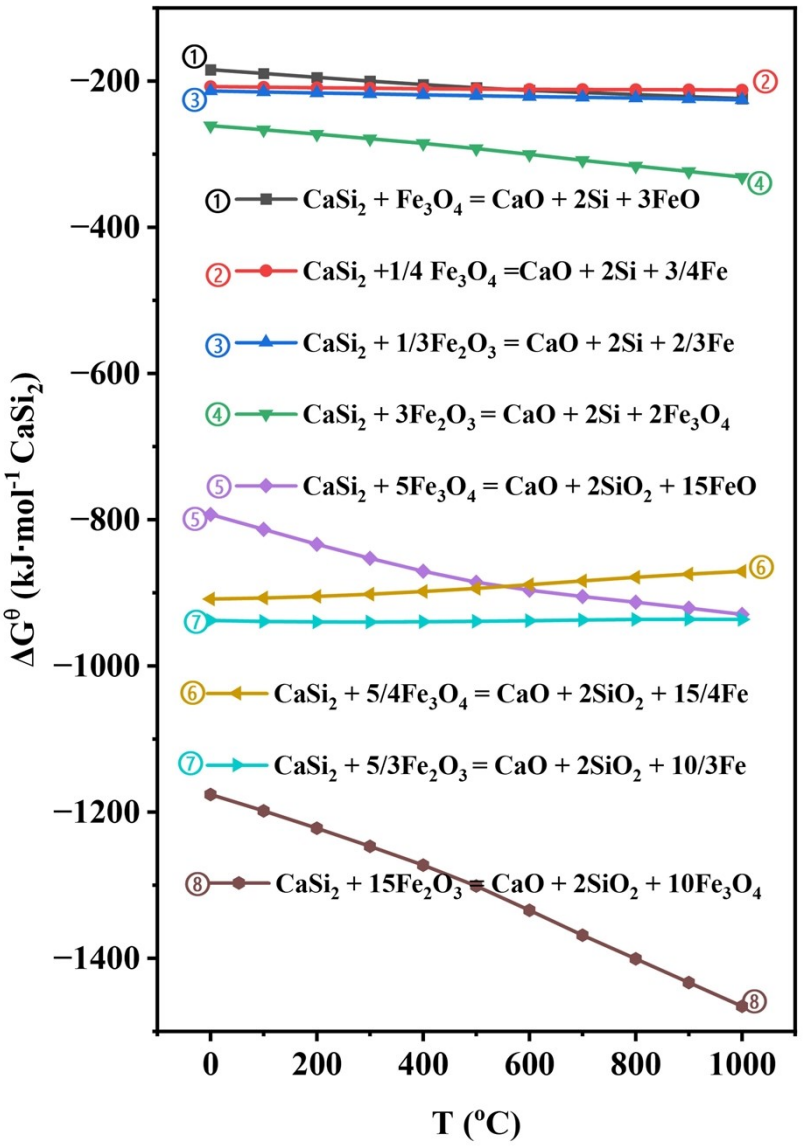

Fig. S1. Ellingham diagram of typical reactions

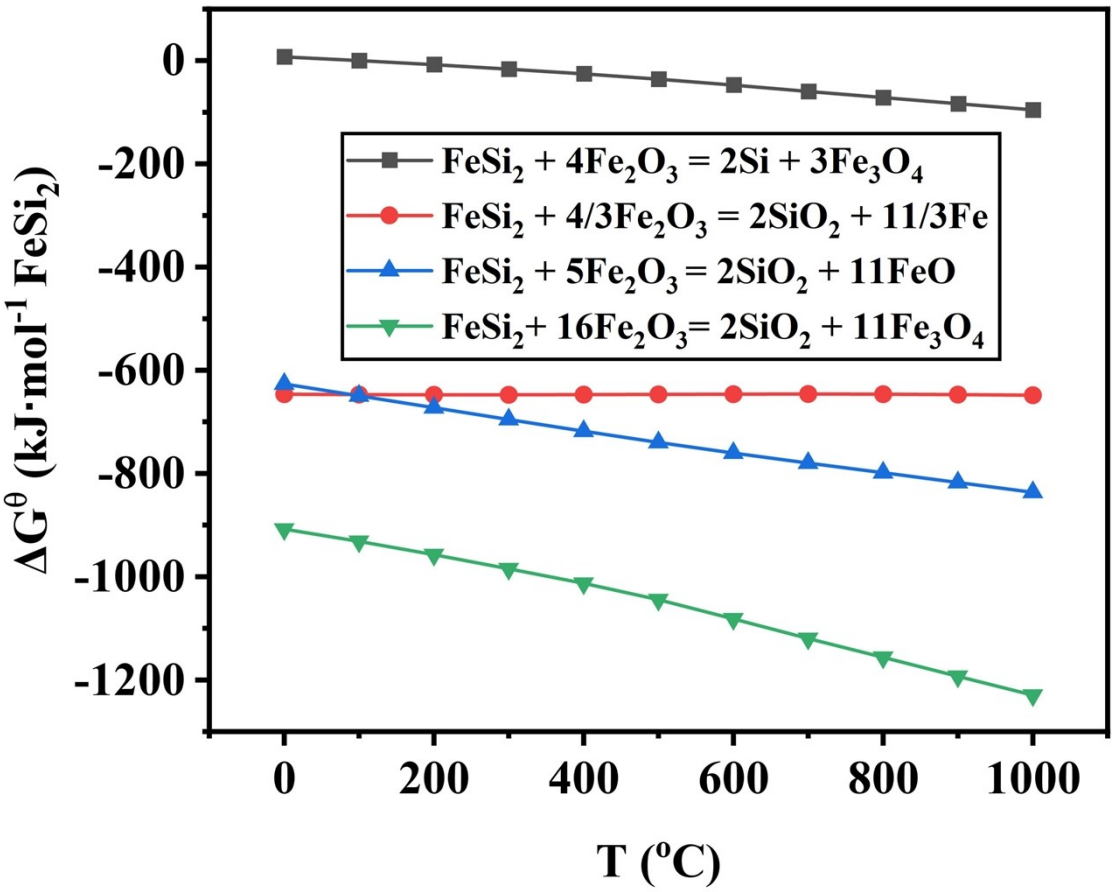

Fig. S2. Ellingham diagram of the reaction between $FeSi_2$ and Fe oxides

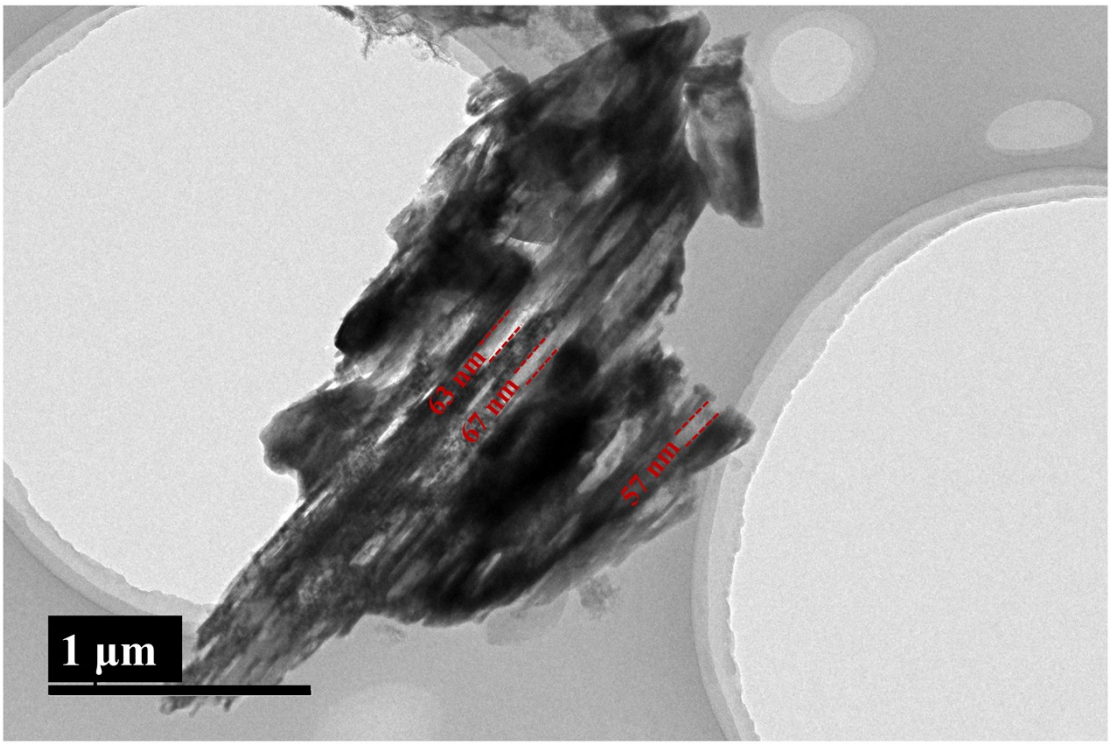

Fig.S3 TEM image of ML-SiO_x-Fe_2O_3

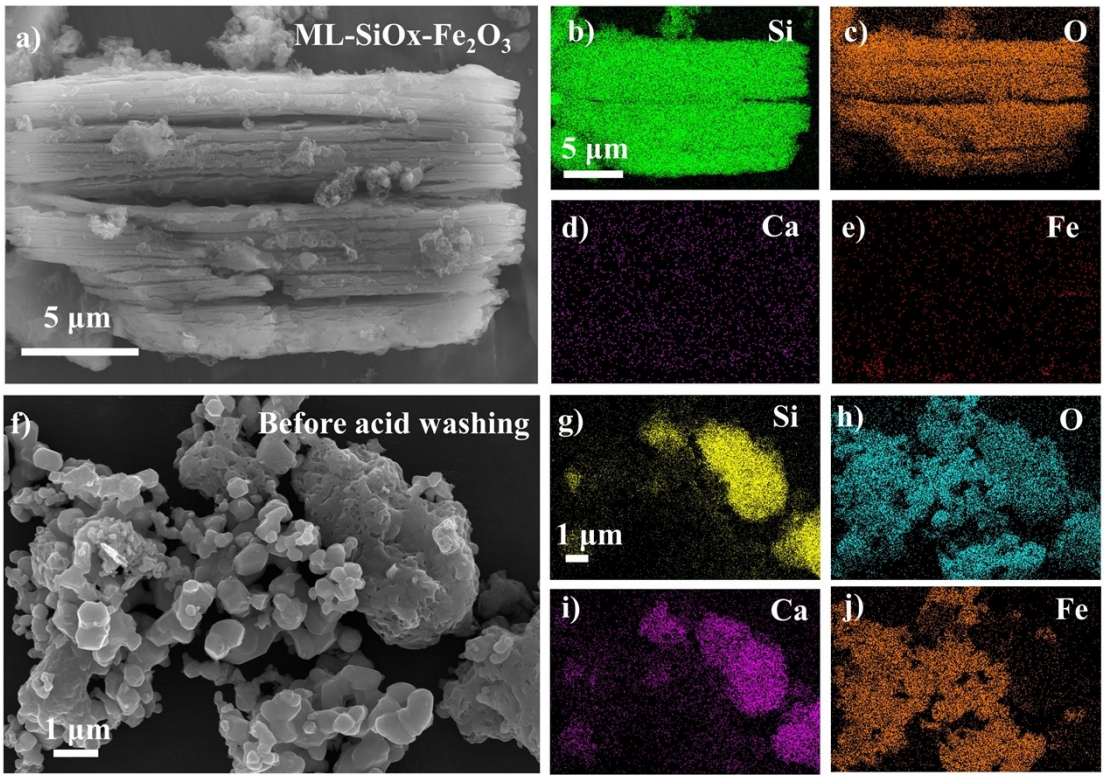

Fig. S4. SEM images and EDS mapping results of ML-SiO_x-Fe_2O_3 after and before acid washing

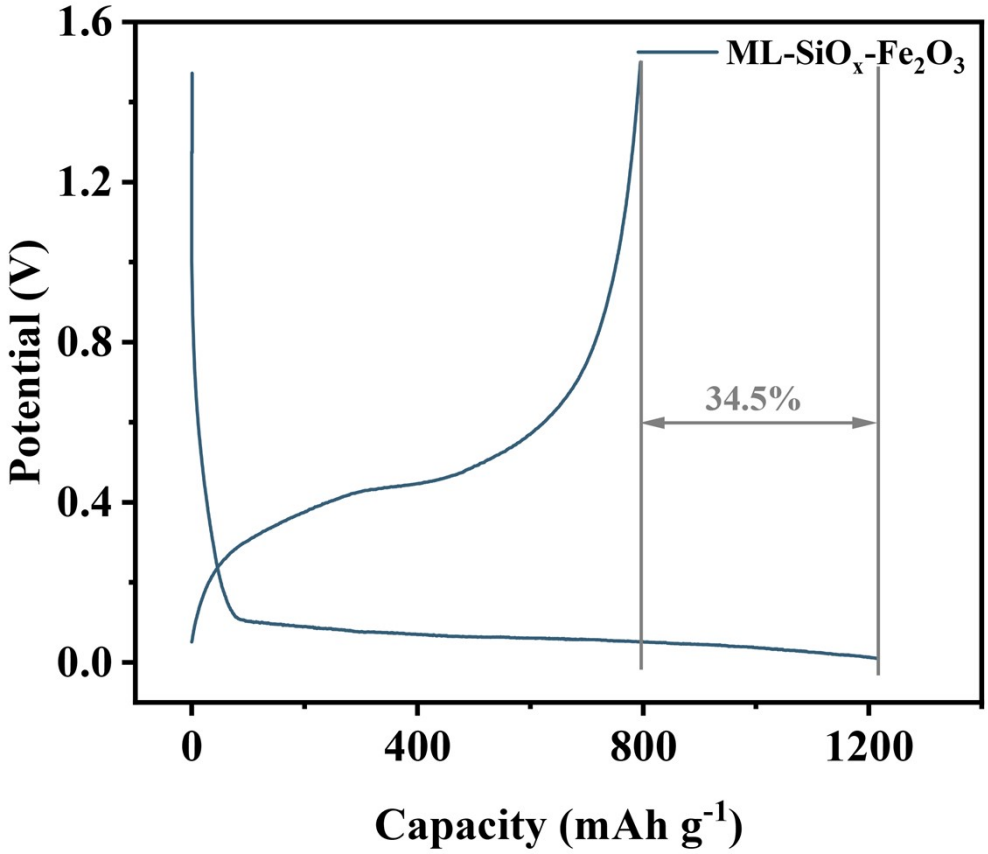

Fig. S5. Galvanostatic charge–discharge curves of ML-SiO_x-Fe_2O_3

Fig. S6. The equivalent circuits of B-Si@SiO_x/C anodes (a) two semicircles